

REMARKS/ARGUMENTS**I. Summary of Office Action**

Claims 1-12 are pending. Examiner rejected claims 1-12.

Claims 1, 2, 4, 6, 8, 9, 11 and 12 under 35 USC 102(b) in light of Hashima et al (US 5,521,843)

Claims 3, 7 and 10 under 35 USC 103(a) over Hashima in view of Verghese (US7,038,709).

Claim 5 under 35 USC 103(a) over Hashima in view of Palm (US 5,699,444).

Examiner remarked that Applicant had amended claims 1, 4 and 11 but had not incorporated the limitation “indicating that the acquired reference image is acquired of a random or arbitrary scene of interest” as discussed in the Examiner Interview as a condition that the rejection based on prior art would be overcome.

Applicant has amended independent claims 1, 4 and 11 to incorporate the limitation.

II. Claim Rejections – 35 USC 102

The Examiner rejected claims 1,2,4,6,8,9,11 and 12 under 35 102(b) as being anticipated by Hashima et al. (US 5,521,843). Applicant has amended independent claims 1, 4, and 11 in light of and in accord with the Examiner Interview. The currently presented claims overcome prior art rejections.

III. Claim Rejections – 35 USC 103

The Examiner rejected claims 3,7 and 10 under 35 USC 103(a) as being unpatentable over Hashima et al in light of Verghese (US 7,038,709), and claim 5 as being unpatentable over Hashima in view of Palm (US 5,699,444). Applicant has amended independent claims 1, 4, and 11 from which claims 3, 7 and 10 depend. Applicant submits that such amendment overcomes the rejection based on Hashima, and consequently, the combination of Hashima and Verghese, and the combination of Hashima and Palm.

IV. CONCLUSIONS

In view of the foregoing, it is respectfully urged that all of the present claims of the application are patentable and in a condition for allowance. Notice of allowance is earnestly solicited. The undersigned applicant can be reached at 650-960-3362 to facilitate prosecution of this application, if necessary.

Respectfully submitted,

DATED: November 26 2008

By: Ken Van Bree
Ken Van Bree
Applicant and Inventor

58 Starr Way
Mountain View, CA 94040
Telephone: (650) 960-3362



1. (currently amended) An imaging system to reposition an image capture device in a position relative to a subject of interest according to six degrees of freedom as preserved in association with a reference image of the subject of interest, comprising:

an image capture device;

a position apparatus on which the image capture device is mounted, operable to orient the image capture device relative to a subject of interest according to six degrees of freedom;

an acquired reference image of the subject of interest, wherein said acquired reference image is acquired of a random or arbitrary scene of interest, identifying fixed points in said reference image, and the reference image comprises a computational model generated from an initial image of the subject of interest;

a computational device coupled to the position apparatus, such computational device capable of receiving images from the image capture device and receiving the reference image, performing a comparison, and communicating adjustments to reposition the image capture device along any of six degrees of freedom.

2. (Original) An imaging system as in claim 1 wherein the communication of position adjustments is via signals to the positional apparatus from the computational device.
3. (Original) An imaging system as in claim 1 wherein the communication of positional adjustment data is by means of a user interface.
4. (currently amended) A method for repositioning an image capture device relative to a subject of interest according to six degrees of freedom comprising the steps of:
- a) initializing an imaging system, wherein initializing includes the steps of:

a.1) obtaining a reference image of the subject of interest, wherein said reference image is acquired of a random or arbitrary scene of interest, identifying fixed points in said reference image, and the reference image comprises a computational model generated from an initial image of the subject of interest, wherein said reference image includes multiple reference points in 3-dimensional space;

a.2) repositioning an image capture device relative to the subject of interest, where such repositioning uses six degrees of freedom;

b) imaging the subject of interest;

c) computing the difference between the reference image of the subject of interest and the image capture device image;

d) refining the position of the image capture device so that the image capture device is in the same position relative to the subject of interest as that position from which the reference image was obtained, where such position refining the position of the image capture device occurs along six degrees of freedom.

5. (Original) A method as in claim 4 in which the step of initializing further includes the step of generating a three dimensional model of the subject of interest through selection of reference points in the subject of interest.
6. (Original) A method as in claim 4 where the reference image is obtained after fixed reference points have been selected in the subject of interest.
7. (Original) A method as in claim 4 where the step of initializing includes extracting reference points from more than one image of the subject of interest representing more than one camera center.
8. (Original) A method as in claim 4 where time has elapsed between the initialization process and the repositioning of the image capture device.

9. (Original) A method as in claim 4 where the computation of position is communicated to an automatic position correction apparatus.
10. (Original) A method as in claim 4 where the computation of position is communicated to the user through an interface.
11. (currently amended) An apparatus for positioning an imaging device and adapted for coupling to an image capture device and where such apparatus positions said image capture device along six degrees of freedom, such that the positioning of the image capture device is controllable and said apparatus orients the image capture device relative to a subject of interest using six degrees of freedom to orient the image capture device, and wherein said positioning of said image capture device relies on a reference image of the subject of interest, wherein said reference image is based on an initial acquired image of a random or arbitrary scene of interest, identifying fixed points in said reference image, and the reference image comprises a computational model generated from said initial image of the subject of interest.
12. (Original) An apparatus as in claim 11 where the positioning of the image capture device is automated.